

140 280 420 560 AGG TA CGT CAACCTGCT AT CGA GTGT CACTGG CCAGTGT CACTGG CCCAGTGT CACTGG GTCTT CCTTCTTCCT CGTGTC TGAAT CTAACCATATATATG CGTATACAT CACAA CTTCTTTGTA C AAA TYSCCCAGTA TYCTTAACCCAACTGCACAGAAAAAAACCTGCAGATA TYCGA TCTTGGTGAGAGAGTGAGTGAGTTCAATAATTATTYGGTTGAGGGCA TGGCCATCAG GGCATAGCCTG TITAACGGGTCATAAGAAITGGGTTGA CGTGTCTTGTTTTTGGACGTCTATAAGCTAGAAC CACTCTCTCGACACTCATGAGGTTCTATCTGTATCAGTTAATAAACCAACTCCCGTACGGGTATCGCGGTATCGGAC GTS CTATIG CTCTA OGOS COSCTATOTITATIC TACTACOS CECTATOTICA COSC CTTTTATATATOCTACCATTGTACCATACOSTATOCATATOS ATG CACGATACGAGATGCGCGCGCGA TAGAAATAGACTAAATAAGACTGCGTATAGACTATGCGGAAAATATATAGGATCTAA CATGGTAACGCTCGATGCTATTGGCAAAGCTACCACACGCGTAGGACAGTTCGGA CAGAITCGCCCAAAITCTCGTCTCCTCCTCTCTCTTCGCCATCTATCACAGGGAAA CACGCCGAGCGTCCTCCGATAAGCATGCGGTGTCTTGGTCTTGTCGCTGTCACCGAACATATCTGGGCTTGA ura3 PnirA P nirA P nirA ERE - ERE ura3

FIG. 5A

568

TTACCATG

P nirA

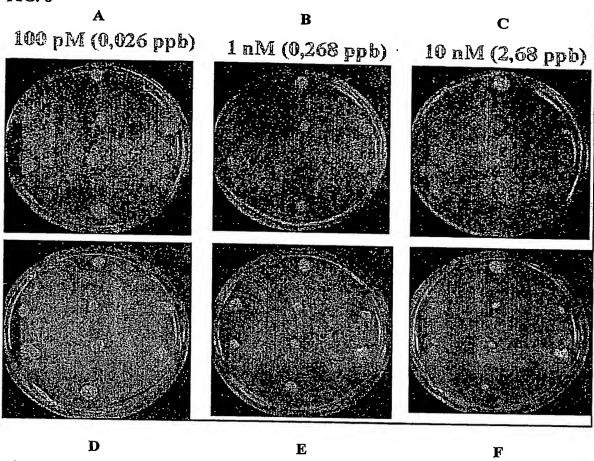
	PuirA
	GTCTTGGTCGCTGTCACCGAACATAICTGTCTGGGCTTGAITTACCATG
	PnirA
420	
	GAGCTACGATAACCETTTCGATGGTGGCGCATCCTGTCAAGATTCGCCCAAAITCTCGTCTCG
	ura3 P nirA
280	TITAACGGGTCATAAGAATTGGGITGA CGTGTCTTTTTGGACGTCGATACGAGATGCGCGGCGATAGAAATAAGATGGCCAAAATAAGACTGCGTATGGGAAAATATATAGAATTAACGTAACG
c c	AAATIGOCCAGIAITCITAACCCAACAGAACAAAAAACGGCGAGCIAIGCICITACGCGCCGCTAITTATCGGTITTATTCTGACGCATACGCCTITTATATATATCTAGATIGTACCATTGC
	ERE COMPANY ERE COMPANY ERE COMPANY WITH A STATE OF CO
0 #	AGGTACGT CAACCTGCTATCGAAGGTACCAGTGTCACTGGCCAGTGTCACTGGGTCTTCCTTC
, ,	I CLAIGCAGA TIGGA CHATHA THE THE THE CHATHA CHATHA CHATHA CHATHA CHATHA THA THA THA THA THA THA THA THA TH

FIG. 5B

170

FIG. 50

FIG. 6



parent strain" (WT)

1 2 3
6 transformants pRM 2119
4 5 6
phER strain

**FIG.** 7

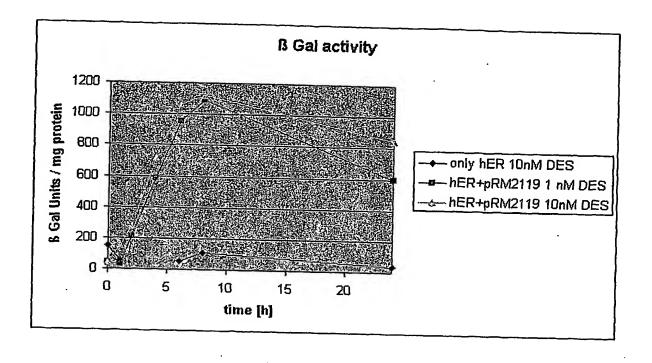


FIG. 8

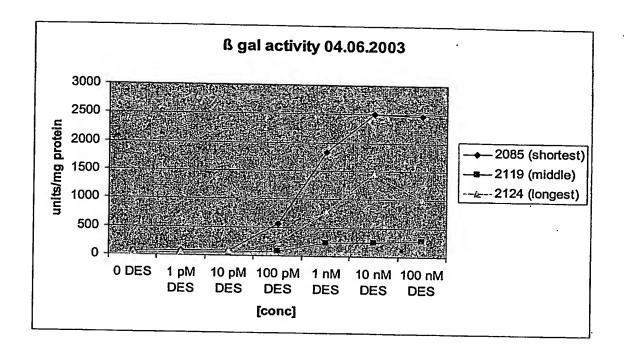
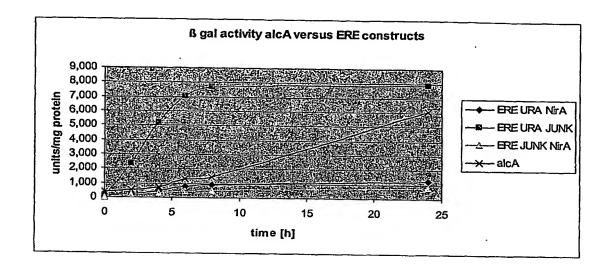




FIG. 9



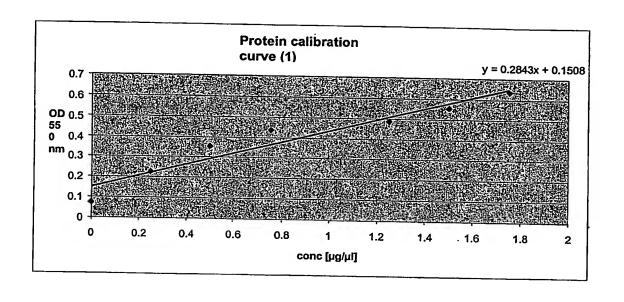


FIG. 11

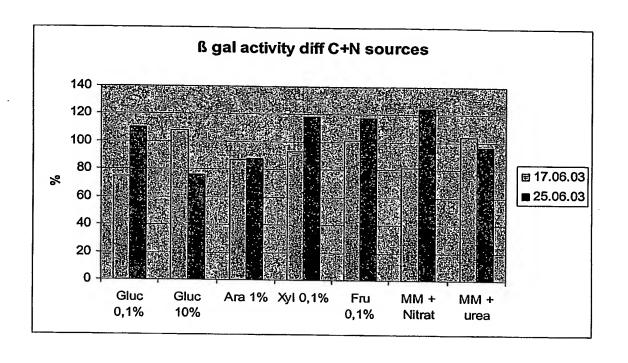


FIG. 12

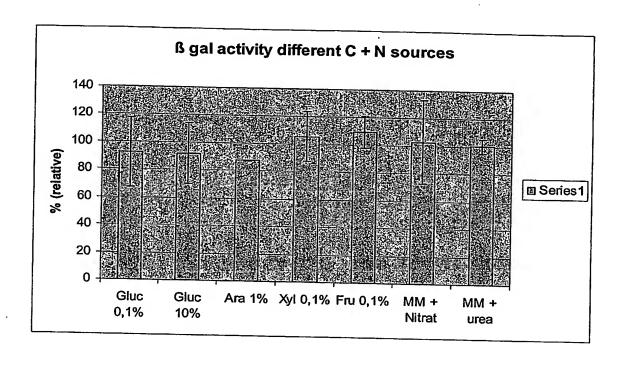
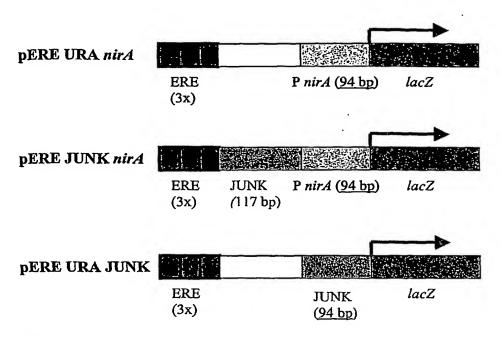


FIG. 13



JUNK: ß lactamase of E. coli

## This Page is inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

□ BLACK BORDERS	
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES	
FADED TEXT OR DRAWING	
D BLURED OR ILLEGIBLE TEXT OR DRAWING	
☐ SKEWED/SLANTED IMAGES	
☐ COLORED OR BLACK AND WHITE PHOTOGRAPHS	
☐ GRAY SCALE DOCUMENTS	
☐ LINES OR MARKS ON ORIGINAL POCUMENT	
☐ REPERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY	
□ OTHER:	

IMAGES ARE BEST AVAILABLE COPY.
As rescanning documents will not correct images problems checked, please do not report the problems to the IFW Image Problem Mailbox